CLAIMS

1. Hybrid promoter comprising:

- all or part of the enhancer region of a strong and ubiquitous promoter/enhancer, and

- a promoter region allowing specific expression in the smooth muscle cells.

2. Hybrid promoter according to claim 1, characterized in that the enhancer region is chosen from the enhancer region of the cytomegalovirus immediate-early (CMV-IE) gene, the enhancer region of the rous sarcoma virus LTR (RSV-LTR), the enhancer region of the SV40 virus, and the enhancer region of the EF1α gene.

3. Hybrid promoter according to claim 2, characterized in that the enhancer region is the enhancer region of the immediate-early gene of the cytomegalovirus (CMV-IE), preferably of the human cytomegalovirus (hCMV-IE).

4. Hybrid promoter according to claim 1, characterized in that the promoter region comprises all or part of the promoter of the gene encoding the α-actin of smooth muscle cells (SMact) or of the SM22 gene.

5. Hybrid promoter comprising:

- all or part of the enhancer region of the human cytomegalovirus immediate-early (hCMV-IE) gene, and

- all or part of the promoter of the gene encoding the α-actin of smooth muscle cells (SMact).

6. Hybrid promoter comprising:

- all or part of the enhancer region of the human cytomegalovirus immediate-early (hCMV-IE) gene, and

- all or part of the promoter of the SM22 gene.

7. Hybrid promoter according to claim 1, characterized in that the promoter region comprises a basal promoter and a sequence conferring tissue specificity, said sequence being derived from the SMact promoter and/or from the SM22 promoter.

8. Expression cassette comprising a nucleic acid encoding an RNA or a polypeptide of interest, placed under the control of a hybrid promoter according to one of claims 1 to 7.

9. Cassette according to claim 8, characterized in that it comprises, in addition, a signal for termination of transcription.

10. Cassette according to claim 8 or 9, characterized in that the nucleic acid encodes a protein chosen from the proteins involved in the cell cycle, the proteins inducing apoptosis, the proteins capable of modifying the proliferation of the smooth muscle cells, the proteins inducing angiogenesis and the transcription factors.

11. Vector comprising a hybrid promoter according to claim 1 or a cassette according to claim 8.

12. Vector according to claim 11, characterized in that it is a plasmid, a cosmid or any DNA not encapsidated by a virus.

13. Vector according to claim 11, characterized in that it is a recombinant virus, preferably derived from an adenovirus, a retrovirus, a herpesvirus or an adeno-associated virus.

14. Composition comprising a vector according to claim 12 and a chemical or biochemical transfer agent.

15. Composition comprising a recombinant virus according to claim 13 and a physiologically acceptable vehicle.

16. Cell modified by a cassette according to claim 8 or a vector according to claim 11.

17. Use of a hybrid promoter according to one of claims 1 to 7 for the preparation of a composition intended for the selective expression of a nucleic acid in the smooth muscle cells.

18. Use of a hybrid promoter according to one of claims 1 to 7 for the preparation of a composition intended for the expression of a nucleic acid in the smooth muscle cells and not in the endothelial cells which are found in the vicinity of the blood vessel.